



SEQUENCE LISTING

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<120> Selection System

<130> 8039/1090

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<150> GB 9810223.9

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<160> 78

<170> PatentIn version 3.1

<210> 1

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<213> Artificial

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<222> (1)..(17)

<223> Synthetic linker peptide sequence with protease recognition sites

<400> 1

Pro Ala Gly Leu Ser Glu Gly Ser Thr Ile Glu Gly Arg Gly Ala His

a12<sup>1</sup>

5

10

15

Glu

<210> 2

<211> 57

<212> DNA

<213> Artificial

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<222> (1)..(57)

<223> Synthetic PCR primer for vector construction/screening

<400> 2

ggcaccctca gaacggtacc ccaccctcag aggccggctg ggccgccacc ctcagag 57

<210> 3

<211> 89

<212> DNA

<213> Artificial

012  
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<222> (1)..(89)

<223> Synthetic PCR primer for vector construction/screening

<400> 3

ggtggcgggc cagccggcct ttctgagggg tcgactatag aaggacgagg gcccagcgaa 60

ggaggtgggg tacccttc tgaggggtgg 89

<210> 4

<211> 89

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<222> (1)..(89)

<223> Synthetic PCR primer for vector construction/screening

<400> 4

ccaccctcag aaggggttac cccacctcct tcgctgggcc ctcgtccttc tatagtcgac 60

ccctcagaaa ggccggctgg gccgccacc 89

Q12

<210> 5

<211> 24

<212> DNA

<213> Artificial

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<222> (1)..(24)

<223> Synthetic PCR primer for vector construction/screening

<400> 5

gcgatgggttg ttgtcattgt cggc 24

<210> 6

<211> 24

<212> DNA

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<220>

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<222> (1)..(24)

<223> Synthetic PCR primer for vector construction/screening

<400> 6

aaaagaaacg caaagacacc acgg

24

A12

<210> 7

<211> 23

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<213> Artificial

<220>

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<222> (1)..(23)

<223> Synthetic PCR primer for vector construction/screening

<400> 7

cctcctgagt acggtgatac acc

23

<210> 8

<211> 24

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(24)

<223> Synthetic PCR primer used to screen for recombinant clones

<400> 8

a12 gtaaattcag agactgcgct ttcc

24

<210> 9

<211> 26

<212> DNA

<213> Artificial

<220>

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<222> (1)..(26)

<223> Synthetic PCR primer used to screen for recombinant clones

<400> 9

attttcgggc atagccccct tattag

26

<210> 10

<211> 65

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(65)

<223> Synthetic PCR primer recognizing FLAG tag nucleotide sequence

<400> 10

caaacgggcg gccgcagact acaaggatga cgacgacaag gaaactgttg aaagttgttt

60

agcaa

65

<210> 11

<211> 51

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(51)

<223> Synthetic PCT primer used to change codon usage in recombinant clones

<400> 11

cccctcagaa aggccggctg ggccgccgcc agcattgaca ggagggttcag g 51

<210> 12

<211> 52

<212> DNA

<213> Artificial

<220>

012 <221> misc\_feature

<222> (1)..(52)

<223> Synthetic PCT primer used to change codon usage in recombinant clones

<400> 12

gaaggaggtg gggtacccgg ttccgagggt ggttccggtt ccggtgattt tg 52

<210> 13

<211> 36

<212> DNA



<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(36)

<223> Synthetic PCR primer for vector construction/screening

<400> 13

ccctcggaac cggtagccca gctgcttcgt gggccc

36

<210> 14

<211> 47

a12 <212> DNA

<213> Bacillus amyloliquefaciens

<400> 14

ctggcgggcg cccagccggc cctgcacagg ttatcaacac gtttgac

47

<210> 15

<211> 43

<212> DNA

<213> Bacillus amyloliquefaciens

<400> 15

ctcggaaccg gtacctctga tttttgtaaa ggtctgataa gcg

43

<210> 16

<211> 44

<212> DNA

<213> Gallus gallus

<400> 16

ggcggcccag ccggcctttc tctctctgac gaggacttca aggc

44

<210> 17

<211> 41

<212> DNA

a12 <213> Gallus gallus

<400> 17

cctcggaacc ggtaccgaag agtcctttct ccttcttgag g

41

<210> 18

<211> 18

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1) .. (18)

<223> Synthetic PCR primer used for library construction

<400> 18

tacgccaagc ttgcatgc

18

<210> 19

<211> 17

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

a12 <222> (1)..(17)

<223> Synthetic PCR primer used for library construction

<400> 19

ctgcacctgg gccatgg

17

<210> 20

<211> 17

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(17)

<223> Synthetic PCR primer used for library construction

<400> 20

gattacgccca agctttg

17

<210> 21

<211> 126

<212> DNA

<213> Erwinia chrysanthemi

a12 <220>

<221> misc\_feature

<223> n at positions 23, 24, 29, 55, 56, 81, 97, 101, and 102 can be G,  
A, T or C

<220>

<221> misc\_feature

<222> (23)..(23)

<223> n at position 23 can be G, A, T or C

<220>

<221> misc\_feature

<222> (24) .. (24)

<223> n at position 24 can be G, A, T or C

<220>

<221> misc\_feature

<222> (29) .. (29)

<223> n at position 29 can be G, A, T or C

<220>

<221> misc\_feature

<222> (55) .. (55)

a12 <223> n at position 55 can be G, A, T or C

<220>

<221> misc\_feature

<222> (56) .. (56)

<223> n at position 56 can be G, A, T or C

<220>

<221> misc\_feature

<222> (81) .. (81)

<223> n at position 81 can be G, A, T or C

<220>

<221> misc\_feature

<222> (97)..(97)

<223> n at position 97 can be G, A, T or C

<220>

<221> misc\_feature

<222> (101)..(101)

<223> n at position 101 can be G, A, T or C

<220>

*A12* <221> misc\_feature

<222> (102)..(102)

<223> n at position 102 can be G, A, T or C

<400> 21

gattacgcca agcttgcattg cannddctnt dtcaaggaga cagtcataat garrnnbcta 60

ttgsyaayrs yasyasyagb nttgttatta ctcsyanycv nncygdccat ggcccaggtg 120

cagctg 126

<210> 22

<211> 117

<212> DNA

<213> Bacteriophage M13mp18

<220>

<221> misc\_feature

<222> (18)..(18)

<223> Nucleotide at position 18 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (19)..(19)

Q12 <223> Nucleotide at position 19 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (20)..(20)

<223> Nucleotide at position 20 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (21)..(21)

<223> Nucleotide at position 21 can be G, A, T or C.

<400> 22

gattacgcca agctttgmn ncttttttww ggagattttc aacrtgaraa rattattatt 60

csyaattsyt ttagttsyts ytttctwtgy ggyccagccg gccatggccc aggtgca 117

<210> 23

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer for vector construction

<400> 23

ctttatgctt ccggctcg 18

012

<210> 24

<211> 17

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1) .. (17)

<223> Synthetic PCT primer for library construction



<400> 24

cgggcccccatt cagatcc

17

<210> 25

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

a12

<400> 25

aagcttgcat gcaaattcta tdtcaaggag acagttataa tgaaatacct

50

<210> 26

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<220>

<221> misc\_feature

<222> (14)..(14)

<223> n at position 14 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (15)..(15)

<223> n at position 15 can be G, A, T or C.

Q12 <220>

<221> misc\_feature

<222> (20)..(20)

<223> n at position 20 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (45)..(45)

<223> n at position 45 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (46) .. (46)

<223> n at position 46 can be G, A, T or C.

<400> 26

aagcttgcat gcannddctn tdtcaaggag acagtcataa tgarrnnbct

50

<210> 27

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

a12 <222> (1) .. (50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 27

aagcttgcat gcagcatctc tdgcaaggag acagtcataa tgaagacgct

50

<210> 28

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 28

aagcttgcat gcacgggctg tdtcaaggag acagtcataa tgagagggt

50

<210> 29

<211> 50

<212> DNA

<213> Artificial

012  
<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 29

aagcttgcat gcaccagctc tdtcaaggag acagtcataa tgaggcggct

50

<210> 30

<211> 55

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(55)

<223> Randomized E. chrysanthemi pelB sequence

<400> 30

attcctaacg gcagccgctg gattgttatt actcgcgggc cagccggcca tggcc

55

<210> 31

<211> 55

<212> DNA

<213> artificial

<220>

<221> misc\_feature

<222> (1)..(55)

<223> Randomized E. chrysanthemi pelB sequence

<220>

<221> misc\_feature

<222> (22)..(22)

<223> n at position 22 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (38)..(38)

<223> n at position 38 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (42)..(42)

<223> n at position 42 can be G, A, T or C.

<220>

<221> misc\_feature

all 2

<222> (43)..(43)

<223> n at position 43 can be G, A, T or C.

<400> 31

attgsyaayr syasyasyag bnttggtatt actcsyanyc vnncygdcca tggcc

55

<210> 32

<211> 55

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1) .. (55)

<223> Randomized E. chrysanthemi pelB sequence

<400> 32

attgcyaatg gtactgtyag gattggttatt actcccaccc ggtccgtcca tggcc 55

<210> 33

<211> 55

<212> DNA

<213> artificial

a12 <220>

<221> misc\_feature

<222> (1) .. (55)

<223> Randomized E. chrysanthemi pelB sequence

<400> 33

attgcyaatg ctagtgcyag gggtggttatt actcccaatc gcgccggcca tggcc 55

<210> 34

<211> 54

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(54)

<223> Randomized E. chrysanthemi pelB sequence

<220>

<221> misc\_feature

<222> (22)..(22)

<223> n at position 22 can be G, A, T or C.

<220>

Q12 <221> misc\_feature

<222> (43)..(43)

<223> n at position 43 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (44)..(44)

<223> n at position 44 can be G, A, T or C.

<400> 34

attggttaata gcagcagtag bnttgtagg actgcaccc ccnncyadcc atgg

54



<210> 35

<211> 22

<212> PRT

<213> *Erwinia chrysanthemi*

<400> 35

Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala

1

5

10

15

Ala Gln Pro Ala Met Ala

20

<210> 36

<211> 22

<212> PRT

<213> Artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(22)

<223> Randomized *E. chrysanthemi* pelB sequence

Q12

<400> 36

Met Lys Thr Leu Ala Met Val Leu Val Gly Gly Pro Pro Gly Pro Ser

1

5

10

15

Ala Gln Pro Ala Met Ala

20

<210> 37

<211> 21

<212> PRT

<213> Artificial

a12  
<220>

<221> MISC\_FEATURE

<222> (1)..(21)

<223> Randomized E. chrysanthemi pelB sequence

<400> 37

Met Arg Gly Leu Ala Met Leu Val Ala Gly Gly Pro Ile Ala Pro Ala

1

5

10

15

Gln Pro Ala Met Ala

&lt;210&gt; 38

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (1) .. (23)

&lt;223&gt; Randomized E. chrysanthemi pelB sequence

a12 &lt;400&gt; 38

Met Arg Arg Leu Val Pro Ile Thr Ala Ala Val Gly Leu Leu Ala Pro

1

5

10

15

Pro Thr Gln Pro Ala Met Ala

20

&lt;210&gt; 39

&lt;211&gt; 50

&lt;212&gt; DNA

&lt;213&gt; Artificial

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 39

aagcttttga cgcttttttt ttgagatttt caacgtgaaa aaattattat

50

<210> 40

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (9)..(9)

<223> n at position 9 is can be G, A, t or C.

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<220>

<221> misc\_feature

<222> (10)..(10)

<223> n at position 10 is can be G, A, t or C.

<220>

<221> misc\_feature

<222> (11)..(11)

<223> n at position 11 is can be G, A, t or C.

<220>

<221> misc\_feature

<222> (12)..(12)

*Q12* <223> n at position 12 is can be G, A, t or C.

<400> 40

aagctttggn nncttttttw wggagatttt caacrtgara arattattat

50

<210> 41

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1) .. (50)

<223> Randomized bacteriophage M13 g3 sequence.

<400> 41

aagctttggg gccttttttt aggagatttt caacatgaga agattattat

50

<210> 42

<211> 50

<212> DNA

<213> Artificial

012 <220>

<221> misc\_feature

<222> (1) .. (50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 42

tcgcaattcc tttagttggt cctttctatg cggcccagcc ggccatggcc

50

<210> 43

<211> 50

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 43

tcsyaattsy tttagttsyt sytttctwtg yggycagcc ggccatggcc

50

<210> 44

<211> 50

<212> DNA

012 <213> Artificial

<220>

<221> misc\_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 44

tcctaattcc tttagtgtt gctttctatg tggccagcc ggccatggcc

50

<210> 45

<211> 22

<212> PRT

<213> Artificial

<220>

<221> MISC\_FEATURE

<222> (1) .. (22)

<223> Randomized bacteriophage M13 g3 sequence

<400> 45

Met Lys Lys Leu Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ala

1

5

10

15

Ala Gln Pro Ala Met Ala

20

<210> 46

<211> 22

<212> PRT

<213> Artificial

<220>

<221> MISC\_FEATURE

<222> (1) .. (22)

<223> Randomized bacteriophage M13 g3 sequence



<400> 46

Met Arg Arg Leu Leu Leu Ala Pro Pro Val Ala Val Pro Phe Tyr Val

1

5

10

15

Val Gln Pro Ala Met Ala

20

<210> 47

<211> 18

<212> DNA

<213> artificial

012  
<220>

<221> misc\_feature

<222> (1)..(18)

<223> Synthetic oligonucleotide primer used as substrate for Stoffel fragment of *Thermus aquaticus* DNA polymerase I

<400> 47

tttcgcaaga tgtggcgt

18

<210> 48

<211> 12

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(12)

<223> Synthetic primer used as substrate for Stoffel fragment of Thermus aquaticus DNA polymerase I

<400> 48

gcgaagatgt gg

12

012  
<210> 49

<211> 30

<212> DNA

<213> artificial

<220>

<221> misc\_feature

<222> (1)..(30)

<223> Synthetic oligonucleotide primer used as substrate for Thermus aquaticus DNA polymerase I

<400> 49

aaatacaaca ataaaacgcc acatcttgcg

30

<210> 50

<211> 20

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(20)

<223> Synthetic oligonucleotide sequence insert containing PstI restriction site and frame shift for H102A mutant barnase fusion construct fused to p3 gene of phage fd-3.

Q12

<400> 50

ctgcaggcgg tgcggccgca

20

<210> 51

<211> 24

<212> DNA

<213> artificial

<220>

<221> misc\_feature

<222> (1)..(24)

<223> Synthetic oligonucleotide used for random priming

<220>

<221> misc\_feature

<222> (19)..(19)

<223> n at position 19 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (20)..(20)

<223> n at position 20 can be G, A, T or C.

a/2  
<220>

<221> misc\_feature

<222> (21)..(21)

<223> n at position 21 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (22)..(22)

<223> n at position 22 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (23)..(23)

<223> n at position 23 can be G, A, T or C.

<220>

<221> misc\_feature

<222> (24)..(24)

<223> n at position 24 can be G, A, T or C.

<400> 51

gagcctgcag agctcaggnn nnnn

24

A12

<210> 52

<211> 23

<212> DNA

<213> artificial

<220>

<221> misc\_feature

<222> (1)..(23)

<223> Synthetic PCR primer used to re-amplify randomly amplified E. col  
i genomic DNA sequences.

<400> 52

cgtgcgagcc tgcagagctc agg

23

<210> 53

<211> 45

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(45)

<223> Barstar binding barnase-p3 fusion insert

012 <400> 53

Leu Gln Ser Ser Gly Asp Cys Val Ile Ser Asp Thr Cys Ile Ala Gly

1

5

10

15

Met Ala Glu Ala Ala Ala Cys Glu Glu Lys Phe Ser Ser Gln Asn Val

20

25

30

Gly Leu Thr Ile Thr Val Thr Pro Cys Leu Ser Ser Ala

35

40

45

<210> 54

<211> 44

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 54

012

Leu Gln Ser Ser Gly Cys Gly Ser Ser Gly Ser Ser Ile Asn Cys Leu

1

5

10

15

Pro Cys Gly Ala Thr Ser Arg Gly Thr Ser Pro Leu Ala Ser Gly Leu

20

25

30

Pro Ser Ser Ala Thr Ile His Cys Leu Ser Ser Ala

35

40

<210> 55

<211> 40

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(40)

<223> Barstar binding barnase-p3 fusion insert

<400> 55

Leu Gln Ser Ser Gly Asp Ser Ala Gly Cys Lys Asn Met Thr Gly Gly

1

5

10

15

Q12

Arg Leu Tyr Ala His Thr Leu Glu Ala Ile Ile Pro Gly Phe Ala Val

20

25

30

Ser Ala Pro Ala Cys Glu Pro Ala

35

40

<210> 56

<211> 33

<212> PRT

<213> artificial



<220>

<221> MISC\_FEATURE

<222> (1) .. (33)

<223> Barstar binding barnase-p3 fusion insert

<400> 56

Leu Gln Ser Ser Gly Cys Val Arg Leu Lys Arg Thr Ser Val Asn His

1

5

10

15

Gln Pro Asp Ala Trp Pro Glu Pro His Leu Lys Ala Ala Cys Glu Pro

20

25

30

Ala

<210> 57

<211> 44

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1) .. (44)

<223> Barstar binding barnase-p3 fusion insert

<400> 57

Leu Gln Ser Ser Gly Cys Gly Ser Ser Gly Ser Ser Ile Asn Cys Leu

1

5

10

15

Pro Cys Gly Ala Thr Ser Arg Gly Thr Ser Pro Leu Ala Ser Gly Leu

20

25

30

a12 Pro Ser Ser Ala Thr Val Gln Cys Leu Ser Ser Ala

35

40

<210> 58

<211> 41

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(41)

<223> Barstar binding barnase-p3 fusion insert

<400> 58

Leu Gln Ser Ser Gly Lys Ile Val Gln Ala Gly Ala Asn Ile Gln Asp

1

5

10

15

Gly Cys Ile Met His Gly Tyr Cys Asp Thr Asp Thr Ile Val Gly Glu

20

25

30

Asn Gly His Ile Gly Leu Ser Ser Ala

35

40

Q12  
<210> 59

<211> 45

<212> PRT

<213> Artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(45)

<223> Barstar binding barnase-p3 fusion insert

<400> 59

Leu Gln Ser Ser Gly Val Cys Val Ile Ser Asp Thr Cys Ile Ala Gly

1 5 10 15

Thr Ala Glu Ala Ala Ala Cys Glu Glu Lys Phe Ser Ser Gln Asn Val

20 25 30

Gly His Thr Ile Thr Glu Thr Pro Cys Leu Ser Ser Ala

35 40 45

<210> 60

012 <211> 44

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 60

Leu Gln Ser Ser Gly Cys Gly Ser Ser Gly Ser Ser Ile Asn Cys Leu

1 5 10 15

Pro Cys Gly Ala Thr Ser Arg Gly Thr Ser Pro Leu Ala Ser Gly Leu  
20 25 30

Pro Ser Ser Ala Thr Ile Gln Cys Leu Ser Ser Ala  
35 40

<210> 61

<211> 53

<212> PRT

<213> Artificial

a12  
<220>

<221> MISC\_FEATURE

<222> (1)..(53)

<223> Barstar binding barnase-p3 fusion insert

<400> 61

Leu Gln Ser Ser Gly Gln Asp Ser Gln Arg Glu His Ala Ser His Thr  
1 5 10 15

Ala Glu Asp Asp Cys Glu Asp Gln Thr Arg Ile His Gln His Ile Arg  
20 25 30

Glu Val Asp Phe Val Asp Thr Pro Gln Glu Val Asp Asp Cys Arg Ala

35

40

45

Ala Leu Ser Ser Ala

50

<210> 62

<211> 33

<212> PRT

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<222> (1)..(33)

<223> Barstar binding barnase-p3 fusion insert

<400> 62

Leu Gln Ser Ser Gly Cys Val Arg Leu Lys Arg Thr Ser Val Asn His

1

5

10

15

Gln Pro Asp Ala Trp Pro Glu Pro His Leu Lys Ala Ala Cys Glu Pro

20

25

30

Ala

<210> 63

<211> 9

<212> PRT

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<222> (1)..(9)

012 <223> Barstar binding barnase-p3 fusion insert

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Leu Gln Ser Ser Gly Val Arg Pro Ala

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<210> 64

<211> 44

<212> PRT

<213> Artificial

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<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 64

Leu Gln Ser Ser Gly Cys Gly Ser Ser Gly Ser Ser Ile Asn Cys Leu

1

5

10

15

Pro Cys Gly Ala Thr Ser Arg Gly Thr Ser Pro Leu Ala Ser Gly Leu

20

25

30

A12

Pro Ser Ser Ala Thr Ile Gln Cys Leu Ser Ser Ala

35

40

<210> 65

<211> 30

<212> PRT

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<222> (1)..(30)



<223> Barstar binding barnase-p3 fusion insert

<400> 65

Leu Gln Ser Ser Gly Thr Glu Val Asp Arg Gly Asn Gln Gln His Asp

1 5 10 15

Thr Asn Asp Arg Asp Phe Thr His Thr Pro Leu Ser Ser Ala

20 25 30

Q12 <210> 66

<211> 36

<212> PRT

<213> Artificial

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<222> (1)..(36)

<223> Barstar binding barnase-p3 fusion insert

<400> 66

Leu Gln Ser Ser Gly Val Ala Gln Gly Ser Ser Ala Ser Val Asp Val

1 5 10 15

Thr Ala Thr Asn Ala Val Leu Ser Ala Asp Ser Leu Ser Leu Gly Gly

20

25

30

Gly Glu Pro Ala

35

<210> 67

<211> 19

<212> PRT

<213> Artificial

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<222> (1)..(19)

<223> Barstar binding barnase-p3 fusion insert

<400> 67

Leu Gln Ser Ser Gly Gly Ala Val Ala Val Thr Pro Gly Pro Val Leu

1

5

10

15

Ser Ser Ala

<210> 68

<211> 18

<212> PRT

<213> Artificial

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<222> (1) .. (18)

<223> Barstar binding barnase-p3 fusion insert

012

<400> 68

Leu Gln Ser Ser Gly His Cys Arg Gly Lys Pro Val Leu Cys Thr His

1

5

10

15

Thr Ala

<210> 69

<211> 9

<212> PRT

<213> Artificial

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<222> (1) .. (9)

<223> Barstar binding barnase-p3 fusion insert

<400> 69

Leu Gln Ser Ser Gly Val Arg Pro Ala

1

5

a12 <210> 70

<211> 36

<212> PRT

<213> Artificial

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<221> MISC\_FEATURE

<222> (1) .. (36)

<223> Barstar binding barnase-p3 fusion insert

<400> 70

Leu Gln Ser Ser Gly Glu Pro Ala Pro Ala His Glu Ala Lys Pro Thr

1

5

10

15

Glu Ala Pro Val Ala Lys Ala Glu Ala Lys Pro Glu Thr Pro Ala His

20

25

30

Leu Ser Ser Ala

35

<210> 71

<211> 33

<212> PRT

<213> Artificial

<220>

<221> MISC\_FEATURE

<222> (1) .. (33)

<223> Barstar binding barnase-p3 fusion insert

<400> 71

Leu Gln Ser Ser Gly Cys Val Arg Leu Lys Arg Thr Ser Val Asn His

1

5

10

15

Gln Pro Asp Ala Trp Pro Glu Pro His Leu Lys Ala Ala Cys Glu Pro

20

25

30

Ala

<210> 72

<211> 36

<212> PRT

<213> Artificial

<220>

Q12

<221> MISC\_FEATURE

<222> (1) .. (36)

<223> Barstar binding barnase-p3 fusion insert

<400> 72

Leu Gln Ser Ser Gly Val Val Asp Trp Ala Lys Met Arg Glu Ile Ala

1

5

10

15

Asp Ser Ile Gly Ala Tyr Leu Phe Val Asp Met Ala His Val Ala Ala

20

25

30

Leu Ser Ser Ala

35

<210> 73

<211> 117

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(117)

<223> Vector pK1 polylinker sequence

012

<400> 73

aatgctggcg gcggccccagc cggcctttct gaggggtcga ctatagaagg acgagggggcc 60

cacgaaggag gtgggggtacc cggttccgag ggtgggtccg gttccggtga ttttgat 117

<210> 74

<211> 39

<212> PRT

<213> Artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(39)

<223> Polypeptide encoded by pK1 vector polylinker sequence

<400> 74

Asn Ala Gly Gly Gly Pro Ala Gly Leu Ser Glu Gly Ser Thr Ile Glu

1

5

10

15

Gly Arg Gly Ala His Glu Gly Gly Gly Val Pro Gly Ser Glu Gly Gly

20

25

30

Ser Gly Ser Gly Asp Phe Asp

35

<210> 75

<211> 117

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(117)

<223> vector pK2 polylinker sequence



<400> 75

aatgctggcg gcggcccagc cggcctttct gaggggtcga ctatagaagg acgagggccc 60

acgaagcagc tgggggtaccg gttccgaggg tggttccggt tccggtgatt ttgatta 117

<210> 76

<211> 39

<212> PRT

<213> Artificial

a12

<220>

<221> MISC\_FEATURE

<222> (1) .. (39)

<223> Polypeptide sequence encoded by vector pK2 polylinker region.

<220>

<221> MISC\_FEATURE

<222> (38) .. (38)

<223> X represents a TGA stop codon

<220>

<221> MISC\_FEATURE

<222> (36) .. (36)

<223> X represents a stop codon (TGA)

<400> 76

Asn Ala Gly Gly Gly Pro Ala Gly Leu Ser Glu Gly Ser Thr Ile Glu

1

5

10

15

Gly Arg Gly Pro Thr Lys Gln Leu Gly Tyr Arg Phe Arg Gly Trp Phe

20

25

30

Arg Phe Arg Xaa Phe Xaa Leu

35

<210> 77

<211> 35

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<222> (1)..(35)

<223> Sequence of the junction region between Barnase and p3 in recombi  
nant fusion vector fd-3.

<400> 77

atcagactgc aggcggtgcg gccgcagaaa ctggt

35

<210> 78

<211> 11

<212> PRT

<213> artificial

<220>

<221> MISC\_FEATURE

<222> (1)..(11)

<223> Amino acid sequence about the junction of barnase and p3 coding regions of recombinant fusion vector fd-3.

<400> 78

Ile Arg Leu Gln Ala Ala Ala Glu Thr Val

1

5

10

1

1